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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,286	10/31/2003	Edmund J. Ring	58780US002	1619

32692 7590 06/14/2006

3M INNOVATIVE PROPERTIES COMPANY  
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EXAMINER
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FASTOVSKY, LEONID M

ART UNIT	PAPER NUMBER
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3742

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/698,286

**Applicant(s)**

RING, EDMUND J.

**Examiner**

Leonid M. Fastovsky

**Art Unit**

3742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 2,5-12,14-18 and 22-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,13,19-21 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-4 and 13 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamp in view of Tamura and further in view of Carosa (5,216,402). Kamp discloses an inductive heating device comprising a power supply 1 including a work head 4, inductive coils 5,7 configured to couple the power supply 1 to the work head, the inductive coupling assembly including a primary coil 24, a secondary coil 13 and an inductive core 12, the power supply 1 being electrically coupled to the primary coil 13, the second coil being electrically coupled to the work head 4, the primary and secondary coils configured to be magnetically coupled through the inductor core 12 when the inductive coils 5, 7 are coupled. Also, the inductor core 12 is attached within and extends from the primary coil 24 and attaches within and extends from the secondary coil 13.

However, Kamp does not disclose a coupling sleeve and the inductive coupling removably coupling the coils.

Tamura discloses a core 21 constituting a wire-coil for applying high voltage and a protective shield wiring –sleeve 23 with protective cladding on the outside of the shielding wire 23 is provided.

Carosa discloses a removable coupler 10 comprising a primary coil 14, a power source 11 and a secondary coil 23, 25 (col. 4, lines 30-43).

It would have been obvious to one having ordinary skill in the art to modify Kamp's invention to include a removable coupler as taught by Carosa in order to reduce production costs by allowing easy disassembly of primary and secondary circuits (Abstract, lines 1-4), and further to include a protective sleeve as taught by Tamura as reasonably pertinent to the particular problem of facilitating the assembly and disassembly of the inductive heating device in accordance with MPEP 2141.01(a)

3. Claim 28 is rejected under 35 U.S.C. 103(a) over Kamp et al in view of Carosa. Kamp discloses an inductive heating device comprising a power supply 1 including a primary coil 24, a cable assembly 11 having a first end coupled to the second coil 13 and a second end coupled to a work head 4, an inductor core 12, and means 5, 7 for coupling the cable assembly 11 to the power supply such that the inductor core 12 couples between the primary coil 24 and the secondary coil 13.

However, Kamp does not disclose the inductive coupling removably coupling the coils. Carosa discloses a removable coupler 10 comprising a primary coil 14, a power source 11 and a secondary coil 23, 25 (col. 4, lines 30-43).

It would have been obvious to one having ordinary skill in the art to modify Kamp's invention to include to include a removable coupler as taught by Carosa in order to reduce production costs by allowing easy disassembly of primary and secondary circuits (Abstract, lines 1-4).

As for claim 13, it would have be obvious to use the teaching of Kamp in view of Kamura and Carosa to use a method of heating a target substrate because they disclose all elements of the invention and capable of so perform.

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

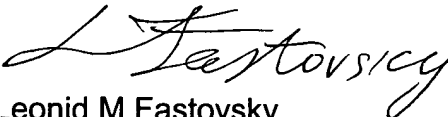
### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1, 3-4,13,19-21 and 28 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid M Fastovsky whose telephone number is 571-272-4778. The examiner can normally be reached on M-Th. 8.00 am -6.00 pm.

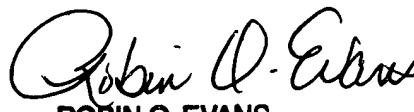
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Leonid M Fastovsky  
Examiner  
Art Unit 3742

lmf

6/10/06

  
ROBIN O. EVANS  
PRIMARY EXAMINER  
6/12/06